	Application No.	Applicant(s)
Notice of Allowability	10/830,025	UMEDA, TAKASHI
	Examiner	Art Unit	
	Amine Riad	2113	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *application filed on 4/23/2004*.

2. ☒ The allowed claim(s) is/are *1-11*.

3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a) ☒ All   b) ☐ Some*   c) ☐ None   of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
        1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .
    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of
        Paper No./Mail Date _____ .

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)
1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☐ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____ .

Detailed Action

Claims 1-11 have been presented for examination.

Claims 1-11 have been allowed.

Examiner notes that many telephonic attempts were made to contact the Applicant's representative in order to fix the minor typographical errors. The last attempt was made Monday April 23, 2007, after which Examiner left a message to Applicant's representative. Examiner took the initiative to enter an Examiner amendment, in which the Examiner corrected the typographical errors.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

* Line 5 of claim 8 contains a typographical error. Examiner changed issuing **ab** input/output into issuing **an** input/output.

* Figure 8 contains a typographical error. Examiner changed Item S22 **[TASTED DEVICE]** into **[TESTED DEVICE]**.

Reasons for Allowance

The following is an Examiner's statement of reasons for allowance:

After a complete search of all the relevant prior art, the Examiner has determined the claims are in condition for allowance. The following limitations when viewed in

combination with the remainder of the claim as a whole place this application in

condition for allowance.

In regard to claim 1,

The Examiner finds the novel and non-obvious feature of claim 1, when read as a whole

to be:

- connection device connected to said server and to said data storage device,

  including a transmission/reception unit to mediate information exchanged

  between said server and said data storage device, which transfers said

  input/output request transmitted from said server to said data storage device, and

  transfers information transmitted by said data storage device in response to said

  input/output request to said server, wherein said connection device further

  includes: a memory unit for storing in advance a test list which associates

  information identifying said data storage device to be tested with setting

  information related to tests; and an input/output analysis unit, connected to said

  transmission/reception unit and to said memory unit, which, upon input of said

  input/output request received by said transmission/reception unit, references said

  test list and judges whether the destination of the input/output request is said

  data storage device to be tested, and if the destination of the input/output request

  is said storage device to be tested, outputs the input/output request to said

  transmission/reception unit after a prescribed length of time has elapsed.

Examiner notes that U.S. Patent 7,159,142 covers testing by simulation, but lacks an important element, that is the connection device inside which the simulation is generated.

In regard to claims 3 and 8

The Examiner finds the novel and non-obvious feature of claims 3 and 8, when read as a whole to be:

- a connection device connected to said server and to said data storage device, including a transmission/reception unit to mediate information exchanged between said server and said data storage device, which transfers said input/output request transmitted from said server to said data storage device, and transfers information transmitted by said data storage device in response to said input/output requests to said server, wherein said connection device further includes: a memory unit for storing in advance a test list which associates information identifying said data storage device to be tested with setting information related to tests; and an input/output analysis unit, connected to said transmission/reception unit and to said memory unit, which, upon input of said input/output request received by said transmission/reception unit, references said test list and judges whether the destination of the input/output request is said data storage device to be tested, and if the destination of the input/output request is said storage device to be tested, generates an error message at a prescribed rate and outputs the error message to said transmission/reception unit, and wherein said transmission/reception unit, upon input of said error message from

said input/output analysis unit, sends said error message to said server which

had issued said input/output request.

Examiner notes that U.S Patent 7,020,803 pertains to injecting error for the purpose of

testing, but does not disclose a connection device that generates error messages (not

errors) without an error occurring, for testing the system without stressing it.

In regard to claims 4 and 9

The Examiner finds the novel and non-obvious feature of claims 4 and 9, when read as

a whole to be:

- connection device connected to said server and to said data storage device,

  including a transmission/reception unit to mediate information exchanged

  between said server and said data storage device, which transfers said

  input/output request transmitted from said server to said data storage device, and

  transfers information transmitted by said data storage device in response to said

  input/output request to said server, wherein said connection device further

  includes an input/output generation unit, connected to said

  transmission/reception unit, which generates an input/output request with said

  connection device as request source and said data storage device as

  destination, and outputs the generated input/output request to said

  transmission/reception unit, and wherein said transmission/reception unit, upon

  receiving information from said data storage device in response to said

  input/output request generated by said input/output generation unit, discards the

  information.

Examiner notes that U.S. Patent 6,123,735 pertains to simulating input output requests in a bus, but lacks the connection device, which discards the request information for the purpose of testing, and to create a delay time.

In regard to claim 7.

The Examiner finds the novel and non-obvious feature of claim 7, when read as a whole to be:

- connection device connected to said server and to said data storage device, including a transmission/reception unit to mediate information exchanged between said server and said data storage device, which transfers said input/output request transmitted from said server to said data storage device, and transfers information transmitted by said data storage device in response to said input/output request to said server, said testing method being a testing method of generating a pseudo-load on said data storage device comprising the steps of: receiving an input/output request issued by said server to said data storage device at said connection device; judging whether the destination of the input/output request is said data storage device to be tested at said connection device; and if the destination of the input/output request is the storage device to be tested, holding the input/output request for a prescribed time before transmitting to said data storage device of said destination at said connection device.

Examiner notes that the difference between U.S Patent 7,137,035 and the current

application is the connection device, which allows the generation of a pseudo load

without using packet generation like 7,137,035 does.

Contact

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Amine Riad whose telephone number is 571-272-8185.

The examiner can normally be reached on 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Robert Beausoliel can be reached on 571-272-3645. The fax phone

number for the organization where this application or proceeding is assigned is 571-

273-8300.Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AR
Amine Riad

Patent Examiner
4/25/07